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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/747,350	12/20/2000	Janet Doong	2204/A44	9258

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EXAMINER

BARQADLE, YASIN M

ART UNIT	PAPER NUMBER
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2153

DATE MAILED: 06/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/747,350

Applicant(s)

DOONG ET AL.

Examiner

Yasin M Barqadle

Art Unit

2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Art Unit: 2153

Response to Amendment

1. Applicant's arguments filed on March 18, 2004 have been considered and are deemed persuasive. However, they are moot in view of the new ground(s) of rejection.

- Claims 1-11 are presented for examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marques et al USPN (6643706) in view of Applicant Admitted Prior Art (hereinafter ``AAPA``).

As per claim 1, Marques et al teach a method for synchronizing a route change in a routing table with a plurality of routing protocols (fig. 2, 220(1-N)) in a network device in a communication network device, the method comprising (fig. 2):

Art Unit: 2153

assigning a route ID value (route entries 310 (1)-(N) to each route in the routing table (routing table 240, fig 2) [col.6, lines 21-57];

assigning a bookmark in a route change queue to each routing protocol, the bookmark having a value equivalent to the route ID value of the last route processed by the routing protocol [col. 13, line 1-41 and col.14, lines 2-60];

assigning a new route ID value to each route changed in the routing table [as routes change node's index is set to current value col. 13, lines 11-41];

storing each route changed in the route change queue [col. 13, line 46]; and

comparing the bookmark value of each routing protocol to the highest route ID value in the route change queue [col. 13, lines 11-41 and col. 16, lines 26-50].

Although Marques et al shows substantial features of the claimed invention including plurality of routing protocols, he does not explicitly show a multicast routing protocol.

Nonetheless, this feature is well known in the art and would have been an obvious modification of the system disclosed by Marques et al, as evidenced by AAPA.

In analogous art, AAPA disclose a multicast routing protocol associated with multicast packets [page 1, last paragraph and page firs paragraph]. Giving the teaching of AAPA, a person of ordinary skill in the art would have readily recognized the desirability and the advantage of modifying Marques et al by

Art Unit: 2153

employing the multicasting routing protocol of AAPA for the benefit of allowing information providers to transmit a packet of multicast information simultaneously to a plurality of consumers in a multicast group.

As per claim 2, Marques et al teach the method according to claim 1, wherein the route change is the addition of a new route to the routing table [col. 15, lines 10-23].

As per claim 3, Marques et al teach the method according to claim 1, wherein the route change is the deletion of a route from the routing table [col. 15, lines 10-23].

As per claim 4, Marques et al teach the method according to claim 1, wherein the route change is updating a route in the routing table [col. 15, lines 10-23].

As per claim 5, Marques et al teach the method according to claim 1, further including processing routes in the route change queue with route ID values greater than the bookmark value of the routing protocol [col. 13, lines 11-41 and col.14, lines 2-60].

As per claim 6, Marques et al teach a route entry for a route in a routing table for a plurality of routing protocols (fig. 2, 220(1-N)), the route entry comprising (fig. 1 and 2):

Art Unit: 2153

an address for the route source network [address of source node fig. 8, 810 (1) col. 12, lines 27-51];

an address for the next hop of the route [address of the next hop node fig. 8, 810 (2) col. 12, lines 27-51];

an address for the next hop interface of the route [interface of next hop node fig. 8, 810 (2) col. 12, lines 27-51];

a route state value for indicating the current state of the route [col. 4, lines 15-35 and col. 10, lines 9-39];

a routing protocol identifier for identifying the routing protocol associated with the route [col. 8, lines 30 to col. 9, line 7]; and

a route ID value for determining when the route entry has been processed by each of the plurality of routing protocols [col. 11, lines 1-27 and col. 13, lines 11-57].

As per claim 7, Marques et al teach a computer program product for use on a computer system for synchronizing a route to change in a routing table with a plurality of routing protocols (fig. 2, 220(1-N)) in a network device in a communication network, the computer program product comprising a computer useable medium having computer readable program code thereon [figs 5A and 5B and col. 10, lines 8-37]:

the claim includes similar limitations as discussed in claim 1 above. Therefore, it is rejected with the same rationale.

Art Unit: 2153

As per claim 8, Marques et al teach the computer program product according to claim 7, wherein the route change is the addition of a new route to the routing table [col. 15, lines 10-23].

As per claim 9, Marques et al teach the computer program product according to claim 7, wherein the route change is the deletion of a route from the routing table [col. 15, lines 10-23].

As per claim 10, Marques et al teach the computer program product according to claim 7, wherein the route change is updating a route in the routing table [col. 15, lines 10-23].

As per claim 11, Marques et al teach the computer program product according to claim 7, further including program code for processing routes in the route change queue with route ID values greater than the bookmark value of the routing protocol [Figs 10 and 14; col. 13, lines 11-41 and col.14, lines 63 to col. 15. line 23].

Conclusion

3. The prior made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2153


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yasin Bargadle whose telephone number is 703-305-5971. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Burgess can be reached on 703-305-9717. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Yasin Bargadle

December 7, 2003


GLENN B. BURGESS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100